

ABSTRACT OF THE DISCLOSURE

Disclosed herein is a torque detector. The torque includes a synchronous detector, a bridge circuit and a signal converter. The synchronous detector detects an AC voltage signal having a preset DC voltage level and a certain frequency, and generates a detection output signal. In the bridge circuit, a torque detection coil whose inductance varies with rotation of a steering wheel and a temperature compensation coil whose inductance varies with temperature variation are connected in series to each other. The detection output signal and the DC voltage are applied to both ends of the two connected coils, respectively. The bridge circuit allows a first detection voltage to be induced at a connecting point between the two coils by variation of the inductance of the two coils. The signal converter generates a torque detection signal having an amplitude corresponding to a difference between peak values of a preset reference voltage and the first detection voltage.